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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.            | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------------|------------------|
| 10/759,839  | 01/16/2004  | Robert H. Milne      | M-292                          | 8756             |
| 802   | 7590        | 12/13/2005           |                                |                  |
| DELLETT & WALTERS<br>P. O. BOX 82788<br>PORTLAND, OR 97282-0788 |             |                      | EXAMINER<br>WERNER, JONATHAN S |                  |
|   |             |                      | ART UNIT                       | PAPER NUMBER     |
|   |             |                      | 3732                           |                  |
| DATE MAILED: 12/13/2005   |             |                      |                                |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

Pat

|                              |                                      |   |  |
|------------------------------|--------------------------------------|---|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/759,839 | <b>Applicant(s)</b><br>MILNE, ROBERT H. |  |
|                              | <b>Examiner</b><br>Jonathan Werner   | <b>Art Unit</b><br>3732                 |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(e).

### ***Claim Objections***

2. Claims 4-9 are objected to because of the following informalities: the description of "an abutment being attachable to said collar portion a crown being attachable to said abutment" lacks the appropriate comma after the word "portion" to separate each defining feature. Appropriate correction is required. However, for the purpose of this Office Action, it will be understood that each feature is defined as separate. Additionally, claim 3 reads "the device includes and adjustment means." It will be understood by the examiner that the word "and" should be "an" for the purpose of this Office Action. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Ricci (WO 01/58374). As to claims 1-2, Ricci discloses a dental implant implantable into

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the alveolar crest comprising a macro-feature disposed to shape gingival tissue into a gingival barrier (page 10, paragraph 1). As to claim 3, Ricci's device includes adjustment means (46, 100) whereby said adjustment means enables the device to be extractable from the alveolar crest. As to claim 5, Ricci shows in Figure 25 a dental implant that includes an implant body (46) screwed into a patient's alveolar bone; said implant body having a collar portion (54), an abutment attachable to said collar portion (268, Figure 28), and a crown attachable to said abutment (270, Fig 28), wherein a circumferential macro-gap is on the collar portion (266). As to claim 10, Ricci shows how to regenerate a jaw bone on a patient by inserting a device into the patient's alveolar crest, wherein said device has a macro-feature to shape gingival tissue (Figs 25-28); allowing the gingival tissue to grow (pg 10, par 1); and extracting the device from the patient's alveolar crest (pg 14, par 1).

4. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Heimke (4,185,383). As to claims 1-2, Heimke discloses a dental implant implantable into the alveolar crest comprising a macro-feature (16). As to claim 3, Heimke's device includes adjustment means (col 2, ln 29-35) enabling the device to be extractable. As to claim 4, Heimke shows in Figure 1 a dental implant that includes an implant body (12); said implant body having a collar portion (1), an abutment (10) attachable to said collar portion, and a crown attachable to said abutment (col 1 ln 60-61), wherein a circumferential macro-gap (16) is on the abutment portion. It should be noted that in claim 4, "an implant body being screwed into a patient's alveolar bone" is considered

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functional language, and as such is not given patentable weight as long as the reference in question comprises the structure claimed – in this case, the implant body.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci in view of Daftary (US 5,073,111). Ricci discloses a dental implant as previously described, but fails to show a circumferential macro-gap on a crown. Daftary, however, teaches a crown (2) with a circumferential macro-gap (91, 98). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a crown with a circumferential macro-gap in order to use a screw for securing the crown to the abutment as taught by Daftary.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci in view of Lauks (US 5,049,073). As to claim 6, Ricci discloses a dental implant as previously described, but fails to show a circumferential macro-gap on a crown. Lauks, however, teaches a crown (8) with a circumferential macro-gap (72). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a crown with a circumferential macro-gap in order to sealingly and

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slidingly engage the collar portion as taught by Lauks. As to claim 7, Ricci fails to show a spacer between the abutment and the crown, wherein a circumferential macro-gap is formed by a space created adjacent said spacer. Lauks, however, teaches a dental implant that has a spacer (66) between an abutment (20) and a crown (4), wherein a circumferential macro-gap (70) is formed by a space created adjacent said spacer (Fig 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to implement a spacer between an abutment and a crown in order to anchor each component to the implant as taught by Lauks.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci in view of Lee (US 5,006,068). Ricci discloses a dental implant as previously described, but fails to show a spacer between a collar portion and an abutment, wherein a circumferential macro-gap is formed by a space created adjacent said spacer. Lee, however, teaches the use of a spacer (30) between a collar (44) and an abutment (92), whereby a macro-gap (49, Fig 1) is formed adjacent the spacer. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to implement a spacer between a collar and an abutment in order to mimic the movement and feel of a natural tooth as taught by Lee.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci in view of Haas (US 5,695,335). Ricci discloses a dental implant as previously described, but fails to show a circumferential macro-protrusion extending from an abutment. Haas,

however, teaches a dental implant with an abutment which has a circumferential macro-protrusion extending from it (16, Fig 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use an abutment which has a circumferential protrusion extending from it in order to fully engage and seat a prosthesis as taught by Haas.

9. Claim 6 is additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Heimke in view of Daftary. Heimke discloses a dental implant as previously described, but fails to show a circumferential macro-gap on a crown. Daftary, however, teaches a crown (2) with a circumferential macro-gap (91, 98). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a crown with a circumferential macro-gap in order to use a screw for securing the crown to the abutment as taught by Daftary.

10. Claims 6 and 7 are additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Heimke in view of Lauks. As to claim 6, Heimke discloses a dental implant as previously described, but fails to show a circumferential macro-gap on a crown. Lauks, however, teaches a crown (8) with a circumferential macro-gap (72). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use a crown with a circumferential macro-gap in order to sealingly and slidingly engage the collar portion as taught by Lauks. As to claim 7, Heimke fails to show a spacer between the abutment and the crown, wherein a

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circumferential macro-gap is formed by a space created adjacent said spacer. Lauks, however, teaches a dental implant that has a spacer (66) between an abutment (20) and a crown (4), wherein a circumferential macro-gap (70) is formed by a space created adjacent said spacer (Fig 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to implement a spacer between an abutment and a crown in order to anchor each component to the implant as taught by Lauks.

11. Claim 8 is additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Heimke in view of Lee. Heimke discloses a dental implant as previously described, but fails to show a spacer between a collar portion and an abutment, wherein a circumferential macro-gap is formed by a space created adjacent said spacer. Lee, however, teaches the use of a spacer (30) between a collar (44) and an abutment (92), whereby a macro-gap (49, Fig 1) is formed adjacent the spacer. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to implement a spacer between a collar and an abutment in order to mimic the movement and feel of a natural tooth as taught by Lee.

12. Claim 9 is additionally rejected under 35 U.S.C. 103(a) as being unpatentable over Heimke in view of Haas. Heimke discloses a dental implant as previously described, but fails to show a circumferential macro-protrusion extending from an abutment. Haas, however, teaches a dental implant with an abutment which has a



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circumferential macro-protrusion extending from it (16, Fig 1). Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to use an abutment which has a circumferential protrusion extending from it in order to fully engage and seat a prosthesis as taught by Haas.

### ***Conclusion***

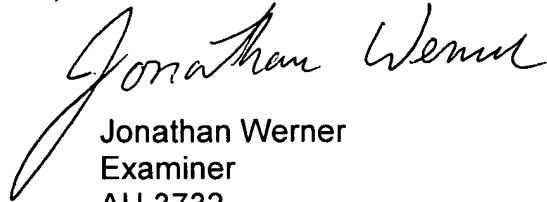
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to included form PTO-892 for all additional pertinent prior art related to dental implants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Werner whose telephone number is (571) 272-2767. The examiner can normally be reached on Monday-Friday.

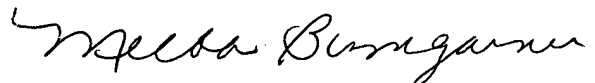
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jonathan Werner  
Examiner  
AU 3732

JSW  
12/2/05

  
MELBA N. BUMGARNER  
PRIMARY EXAMINER